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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 10

Application Number: 08/835,419  
Filing Date: 04/09/97  
Appellant(s): FRAAS et al.

\_\_\_\_\_  
James C. Wray  
For Appellant

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**EXAMINER'S ANSWER**

This is in response to appellant's brief on appeal filed November 24, 1998.

**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

Art Unit: 1764

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is correct.

**(7) *Grouping of Claims***

Appellant's brief includes a statement that claims 1-20, 22 and 23 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

Art Unit: 1764

**(8) *Claims Appealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) *Prior Art of Record***

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

4,397,657

Selep et al.

08/09/83

**(10) *Grounds of Rejection***

The rejections of claims 5, 10, 15 and 20 are hereby dropped by the examiner. The examiner agrees with appellant that they are the first ever to use "vibrating the pretreatment vessel" in a coal pyrolysis apparatus (claims 5 and 15). The examiner agrees with appellant that they are the first ever to use "ceramic balls" to heat coal in a pyrolysis apparatus.

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-4, 6, 7, 9, 11-14, 16-19, 22 and 23 are rejected under 35 U.S.C. 102 (b) as anticipated by or, in the alternative, under 35 U.S.C. 103 (a) as obvious over Selep et al. (US Patent 4,397,657). This rejection is set forth in paragraph 5 of the prior Office action dated June 24, 1998, Paper No. 5.

Application/Control Number: 08/835,419

Page 4

Art Unit: 1764

Claim 8 is rejected under 35 U.S.C. 103 (a) as being obvious over Selep et al. (US Patent 4,397,657). This rejection is set forth in paragraph 6 of the prior Office action dated June 24, 1998, Paper No. 5.

Art Unit: 1764

**(11) Response to Argument**

Appellants argue, on page 9 of the appeal brief filed on November 24, 1998, that Selep et al. does not teach "preheating coal" nor "removing the oxygen". The examiner takes the position that both the gas sweeping with nitrogen in lock 13 and sweeping with steam or product gas in lock 14 clearly would "remove oxygen" from the coal being feed to the apparatus of Selep et al. The examiner maintains that the use of steam or product gas to sweep the coal feed in lock 14 of Selep et al. clearly would raise the temperature of the coal and hence clearly meet the limitation of "preheating the coal".

Appellants argue, on pages 9 and 10 of the appeal brief filed on November 24, 1998, that Selep et al. does not teach "a pretreatment vessel". The examiner maintains that the locks 13 and 14 clearly meet the limitations of a "pretreatment vessel" as set forth in the pending claims and as such clearly have an "inlet" and "outlet" (elements 26, 27 and 40).

Appellants argue, on page 9 of the appeal brief filed on November 24, 1998, that Selep et al. does not teach the pyrolysis retort set forth in claim 3, however, this is clearly seen as element 12 of Selep et al. and the apparatus of Selep et al. clearly prevents the entry of air into the retort.

Appellants argue, on page 10 of the appeal brief filed on November 24, 1998, that Selep et al. does not teach removing moisture as set forth in claim 4. The examiner takes the position that sweeping with nitrogen, steam and product gas as done by Selep et al. clearly will remove moisture as the use of sweep gases such as these are commonly known to remove

Art Unit: 1764

moisture. Appellants argue, on page 10 of the appeal brief filed on November 24, 1998, that Selep et al. does not teach using "carbon monoxide" as a sweep gas, however, carbon monoxide is a common "product gas" of coal pyrolysis such as taught by Selep et al.

Appellants argue, on page 19 of the appeal brief filed on November 24, 1998, that Selep et al. does not teach the structure of claim 8. The examiner maintains that to use product gas as a sweep gas one would have to have some means to partially burn the gas coming from retort 12 of Selep et al.

**(12) Conclusion**

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



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tmc  
February 8, 1999